NATIONAL PRIMARY DRINKING WATER REGULATIONS (NPDWR)
TREATED WATER QUALITY STANDARDS

CONTAMINANT	*MCLG (mg/L)* [1]	*MCL (mg/L)*	*AL (mg/L 2)*
ASBESTOS	7 million fibers/L longer that 10 micrometers	7 million fibers/L longer than 10 micrometers	
ARSENIC		0.05	
BARIUM	2	2	
CADMIUM	0.005	0.005	
CHROMIUM	0.1	0.1	
COPPER	1.3		1.3 [3]
LEAD	0		.015 [4]
MERCURY	0.002	0.002	
NITRATE (AS N)	10	10	
NITRITE (AS N)	1	1	
TOTAL NITRATE AND NITRITE (AS N)	10	10	
SELENIUM	0.05	0.05	
FLUORIDE :	4	4	

(1) Maximum contaminant level goal (MCLG). The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MCLGs are nonenforceable health goals.

(2) Action level (AL). Concentrations of lead or copper in water that determine, in some cases, whether a water system must install corrosion control treatment, monitor source water, replace lead service lines, and undertake a public education program.

(3) The copper action level is exceeded if the concentration of copper in more than 10 percent of tap water samples properly collected during any monitoring period is greater than 1.3 mg/L (i.e., if the "90th percentile" copper level is greater that 1.3 mg/L).

(4) The lead action level is exceeded if the concentration of lead in more that 10 percent of tap water samples properly collected during any monitoring period is greater that 0.015 mg/L (i.e., if the "90th percentile" level is greater than 0.015 mg/L).

2. Contaminant levels for volatile organic chemicals (VOCs) (effective 01 January 1993)

CONTAMINANT	*MCLG (mg/L)*	*MCL (mg/L)*
BENZENE	0	0.005
CARBON TETRACHLORIDE	0	0.005
1,2 - DICHLOROETHANE	0	0.005
1,1 - DICHLOROETHYLENE	0.007	0.007
PARA - DICHLOROBENZENE	0.075	0.075
1,1,1 - TRICHLOROETHANE	0.20	0.20
TRICHLOROETHYLENE	0	0.005
VINYL CHLORIDE	0	0.002
O-DICHLOROBENZENE	0.06	0.6
CIS-1,2 DICHLOROETHYLENE	0.07	0.07
TRANS-1-2 DICHLOROETHYLENE	0.1	0.1
1,2 - DICHLOROPROPANE	0	0.005
ETHYLBENZENE	0.7	0.7
MONOCHLOROBENZENE	0.1	0.1
STYRENE	0.1	0.1
TETRACHLOROETHYLENE	0	0.005
TOLUENE	1	1
XYLENES (TOTAL)	10	10

3. Contaminant levels for organic chemicals, pesticides, and polychlorinated biphenyls (PCBs) effective 01 January 1993)

CONTAMINANT	*MCLG (mg/L)*	*MCL (mg/L)*
ENDRIN	0.002	0.002
LINDANE	0.0002	0.0002
METHOXYCHLOR	0.04	0.04
TOXAPHENE	0	0.003
2,4-D	0.07	0.07
2,4-5-TP (SILVEX)	0.05	0.05
ALACHLOR	0	0.002
ATRAZINE	0.003	0.003
CARBOFURAN	0.04	0.04
CHLORDANE	0	0.002
1,2-DIBROMO-3- CHLOROPROPANE (DBCP)	0	0.0002
ETHYLENE DIBROMIDE (EDB)	0	0.00005
HEPTACHLOR	0	0.0004
HEPTACHLOR EPOXIDE	0	0.0002
PCB S (AS DECACHLORBIPHENYL)	0	0.0005
ALDICARB	0.001	0.003
ALDICARB SULFOXIDE	0.001	0.004
ALDICARB SULFONE	0.001	0.002
PENTACHLOROPHENOL	0	0.001
TOTAL TRIHALOMETHANES (THE SUM OF THE CONCENTRATIONS OF BROMODICHLOROMETHANE, DIBROMOCHLOROMETHANE, TRIBROMOMETHANE (BROMOFORM), AND TRICHLOROMETHANE (CHLOROFORM)		0.10[1]

(1). The MCL for total trihalomethanes applies only to water systems serving 10,000 or more individuals and which add a disinfectant to the water. For systems serving less than 10,000 individuals, individuals States or BUMED (in overseas locations) may adopt an effective date for the MCL.

4. Coliform Bacteria

a. The MCL for coliform bacteria (also called total coliforms) is based on the presence or absence of total coliforms in a semple rather than on an estimate of coliform density.

b. The MCL for potable water systems analyzing at least 40 samples each month: No more than 5.0 percent of the monthly samples may be total coliform-positive.

c. The MCL for systems analyzing fewer than 40 samples each month: No more than one sample each momth may be total coliform-positive.

d. Monitoring and Analytical Requirements

(1) Public water systems must collect total coliform samples at sites which are representative of water through the distribution system. Sampling must be accomplished according to a written sampling plan. The monitoring frequency and number of routine samples required for total coliform monitoring are based on the population served by the system and the type of water source, i.e., groundwater, surface water, etc. Reference (d) contains sampling requirements for the Navy public water system.

(2) The standard sample volume for microbiological analyses must be 100 milliliters.

(3) Approved methods of microbiological analysis include the Autoanalysis Coliert System, also called the Minimum Media ONPG-MUG (MMO-MUG) Test; the Presence-Absence (PA) Coliform Test; the multiple-Tube Fermentation (MTF) Technique, and the membrane Filter (MF) Technique. A step-by-step microbiological test procedure for shipboard use is included in reference (1).

e. Repeat Monitoring

(1) A set of three repeat samples for each total coliform-positive routine sample must be collected. One repeat sample must be collected from the same tap as the original total coliform-positive sample, the other repeat samples must be collected from within five service connections of the original total coliform-positive sample. At least one sample must be upstream and the other downstream. These repeat samples must be collected within 24 hours of being notified of the positive result of the original sample, except where the State waives this requirement on a case-by-case basis.

(2) If a total coliform-positive sample is at the end of the distribution system, or one service connection away from the end of the distribution system, the State may waive the requirement to collect at least one sample upstream or downstream of the original positive sampling site.

(3) If total coliforms are detected in any repeat sample, the system must collect another set of repeat samples, as before, unless the MCL has been violated and the system has notified the State (in which case the State may reduce or eliminate the requirement to take the remaining samples).

(4) If any routine or repeat sample is total coliform-positive, it must also be analyzed to determine if fecal coliforms are present, except that the system may test for E. coli in lieu of fecal coliforms. Or E. coli testing on total coliform-positive samples if the system treats every total coliform-positive sample as fecal coliform positive or E. coli positive and complies with all requirements which apply when a sample is fecal coliform-positive.

5. Turbidity The MCL for turbidity applies to both community water systems and noncommunity water systems using surface water sources in whole or in part. The MCL for turbidity in drinking water measured at representative entry points to the distribution system is:

a. One turbidity unit for monthly average (5 turbidity units monthly may apply at State option).

b. Five turbidity units (maximum) average for 2 consecutive days.

c. These requirements apply to filtered systems until 29 JUNE 1993. The requirements apply to unfiltered systems that the State has determined, in writing, must install filtration until 29 June 1993 or until filtration is installed whichever is later. After the above dates, consult the latest edition of 40 CFR 141.

6. The MCL for Radiological Contaminants are:

Gross alpha particle activity including radium 226 but excluding radon and uranium	15 pCi/L
Combined radium-226 and radium 228	5 pCi/L
Tritium	20,000 pCi/L
Strontium-90	8 pCi/L

Note: Screening indicators have been established for radio-logical contaminants. Gross Alpha present at less than or equal to 5 pCi/L, as an indicator, eliminates the need to analyze for radium 226 and 228. Gross beta present at less than or equal to 8 pCi/L, as an indicator, eliminates the need to analyze for tritium and strontium-90.

7. Sodium and Corrosivity. No MCLs have been published; however, monitoring is required.

NATIONAL SECONDARY DRINKING WATER REGULATIONS (NSDWR)

Secondary Maximum Contaminant levels

CONTAMINANT	MCL (mg/L)
ALUMINIM	0.05 TO 0.02
CHLORIDE	250
COLOR	15 COLOR UNITS
COPPER	1
CORROSIVITY	NONCORROSIVE
FLUORIDE	2
FOAMING AGENTS	0.5
IRON	0.03
MANGANESE	0.05
ODOR	3 THRESHOLD ODOR NUMBER
PH	5.5 - 8.5
SILVER	0.1
SULFATE	250
TOTAL DISSOLVED SOLIDS (TDS)	500
ZINC	5

Note: The contaminants covered by this regulation are those that may adversely affect the aesthetic quality of the drinking water. These secondary levels represent goals for drinking water quality but are not Federally enforceable. Individual States may establish higher, lower, or no levels for these contaminants. All Navy and Marine Corps facilities must provide drinking water of the highest quality in consonance with the NSDWR as well as the Federally enforceable NPWDR.